





# The 2006 Batteries for Advanced Transportation Technologies Annual Peer Review June 6-8, 2006

Lawrence Berkeley National Laboratory
Berkeley, California
Building 66 Auditorium

### Tuesday, June 6

#### Special Plenary Session: The Path from Bench-Top to Marketplace

Time	Speaker	Presentation Title
4:00 pm	John Newman (UCB)	Introduction
4:05	Tien Q. Duong (DOE)	Advanced Energy Initiative and plug-in hybrids
4:15	Yet-Ming Chiang (MIT)	Case Study for Rapid Adoption of Basic Research Results in New Battery Technology
5:00	Per Onnerud (Boston Power)	Leveraging US Based Innovation in Li-ion Materials Development
5:45		Open Discussion
6:00		Reception and poster session
7:30		Adjourn

## Wednesday, June 7

#### **BATT Review**

Time	Speaker	Presentation Title	
8:00 am		Registration	
8:30	Richard Russo (LBNL)	Welcome and introductions	
8:40	David Howell (DOE)	Purpose/guidelines of review	
8:50	Venkat Srinivasan (LBNL)	BATT program description	
Session 1: Alloys and Electrolytes for High Energy Systems			
9:05	Michael Thackeray (ANL)	Intermetallics and Sn-Co ternary alloys	
9:15	Stanley Whittingham (SUNY-Binghamton)	Sn-Co alloys; MnO anodes	
9:25	Darryl DesMarteau (Clemson) Stephen Creager	Ionic melts	
9:35	Nitash Balsara (UCB)	Block co-polymers	
9:45		Discussion	
10:05-10:25		Break	

Session 2: Characterization of Electrolytes and Interphases				
10:25	Alan West (Columbia)	Cycling lithium metal		
10:35	Philip Ross (LBNL)	Transport through the SEI		
10:45	Grant Smith (Utah) Oleg Borodin	Ionic transport		
10:55	John Newman (UCB)	Electrolyte transport and system design		
11:05	John Kerr (LBNL)	Gels and liquid electrolytes		
11:15		Discussion		
Break-out for Poster Session Discussions (Reviewers and PIs only)				
11:35-12:15	5	½ of the reviewers meet w/Session 1; others meet w/Session 2		
12:15-1:00		Lunch		
1:00-1:40		Reviewers switch Sessions		
Session 3: The Working of the LiFePO <sub>4</sub> Electrode				
1:40	Thomas Richardson (LBNL)	Phase evolution		
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1:40	Thomas Richardson (LBNL)	Phase evolution
1:50	Robert Kostecki (LBNL)	Graphitic carbon coatings
2:00	Venkat Srinivasan (LBNL) John Newman (UCB)	Conduction
2:10	Marca Doeff (LBNL)	LiFePO <sub>4</sub> and Mn-based materials
2:20	John Goodenough (Texas, Austin)	Enhanced coated materials
2:30		Discussion
2:50		Break
Break-out for Poster Session Discussions (Reviewers and PIs only)		
3:10		½ of the reviewers meet w/Session 3
3:50		Rest of reviewers meet w/Session 3
4:30		Adjourn

Thursday, June 8

Time	Speaker	Presentation Title	
8:00 am		Attendee arrival	
Session 4	: Synthesis and Characterization of	of Cathode Materials	
8:30	Stanley Whittingham (SUNY-Binghamton)	LiFePO <sub>4</sub> and NMC materials	
8:40	Arumugam Manthiram (Texas, Austin)	Mn-spinel materials	
8:50	Michael Thackeray (ANL)	Mn-rich layered materials	
9:00	Clare Grey (SUNY- SB) Gerbrand Ceder (MIT)	Layered materials	
9:15	Won-Sub Yoon (BNL) Xiao-Qing Yang	Layered materials	
9:25		Discussion	
Session 5	Session 5: Cell Analysis		
9:45	Vincent Battaglia (LBNL)	Electrode construction	
9:55	Karim Zaghib (Hydro Québec)	Cells with WSBs and gels	
10:05		Break	
10:25	Dean Wheeler (BYU) John Harb	Conductive additives	
10:35	Ann Marie Sastry (Michigan)	Electronic conduction	
10:45	Thomas Devine (UCB)	Current-collector corrosion	
10:55		Discussion	
Break-out	for Poster Session Discussions (Rev	iewers and PIs only)	
11:15		½ of the reviewers meet w/Session 4; others meet w/Session 5	
11:55		Reviewers switch Sessions	
12:35-1:15		Lunch	
Closed Ses	ssion		
1:15		DOE meets with reviewers and lab management	
2:45		Adjourn	